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SUMMARY

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Economic Commission for Europe

THE PROSPECTS FOR WORLD STEEL PRODUCTION : THE CHOICE OF PROCESSES

By The United Nations Economic Commission for Europe

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THE PROSPECTS FOR WORLD STEEL PRODUCTION; THE CHOICE OF PROCESSES

by

the United Nations Economic Commission for Europe

A detailed economic comparison of the results obtained by means of various steel-making processes widely used in industry would appear to show that, when new steel plants are built in the next few years, preference will be given to the installation of oxygen converters of the LD and Kaldo types. There will also be a considerable expansion in the production of electric steel. On the basis of the available data concerning long-term plans for the development of steel production throughout the world, it may be estimated that the total capacity of oxygen converters of various types will rise to 100 million tons by 1965 and, according to some forecasts, to 200 million tons by 1970. The following conclusions may be drawn from these plans for the development of oxygen converter steel production:

(a) No new acid Bessemer shops will be built;

(b) There is little probability that new bottom-blown Thomas converter shops will be built, even for blowing with nitrogen-free mixtures;

(c) Only in special circumstances will the construction of new open-hearth shops with fixed furnaces be possible; the construction of tilting open-hearth furnaces and of shops based on cold-charged, open-hearth furnaces is unlikely;

(d) Oxygen converters of different types and electric-arc furnaces will be built in new steel shops;

(e) The construction of new Rotor installations in the near future is not envisaged. Of the two types of rotating steel-making vessels, only Kaldo furnaces are likely to be erected.

These forecasts of the future development of steel production are based on technical and economic data which are given in the report.

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